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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/788,978	02/27/2004	Robert Bonthron Durward	THAS122504	6864
26380 7590 03/20/2008 CHRISTENSEN, O'CONNOR, JOHNSON, KINDNESS, PLLC 1420 FIFTH AVENUE SUITE 2800 SEATTLE, WA 98101-2347				
EXAMINER DWIVEDI, VIKANSHA S				
ART UNIT 3746		PAPER NUMBER		
MAIL DATE 03/20/2008		DELIVERY MODE PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/788,978

Applicant(s)

DURWARD, ROBERT BONTHRON

Examiner

VIKANSHA S. DWIVEDI

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Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 2/25/2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 6-15, 17-23, 25-37 and 39-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6-9, 11, 12, 22, 23, 25-31, 33-35, 39, 42 and 43 is/are rejected.
- 7) ☒ Claim(s) 10, 13-15, 18-21, 32, 36, 37, 40 and 41 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftperson's Patent Drawing Review (PTO-848)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 2/25/2008
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/25/2008 has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 6-9, 11-12, 22-23, 25-31, 33-35, 39, 42 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Foreman et al. (U.S. patent number 5,127,773) in view of Guest (U. S. patent number 3,837,214).

Foreman discloses an apparatus for enhancing fluid velocity in a pipeline comprising: pigs (12) equipped with a thruster propulsion system (100) to propel them along a pipeline (14), a pipeline (14) having a holding zone (20) and a separation zone (10) in which the thruster pigs (12) are removed from the fluid flow; and means for driving thruster pigs sequentially through the pipeline (14) containing fluid at speeds in excess

of that provided by a pressure system for the pipeline, such that the fluid is pushed by the thruster pigs and fluid is drawn by areas of low pressure created by the passage of the thruster pigs through the pipeline (front or back of 12 depending on the direction of movement of the pig); wherein the separation zone (10) is connected to a thruster pig return line (pipeline 14) which returns the thruster pigs to the holding zone (20); wherein the thruster pigs (12) are driven at speeds which are a multiple of a fluid speed (air speed) provided by the pressure system for the pipeline, thereby multiplying the capacity of the pipeline; . Foreman does not disclose a pig independent of fluid pressure. Guest discloses a pig (Shown in figure 1) a pig that moves independently, a pig that is self-propelled and which is remotely controlled. In the method and apparatus of propulsion disclosed by Guest, pig has an electromagnetic energy signal transmitted therefrom through the pipeline and the pig is automatically stopped as a result of the acoustic detection of a leak; Guest also discloses a motor control circuit (40) which is one of linear synchronous motors, linear motors, linear induction motors, linear electrodynamic motors and a pulsed linear induction motor (conventional motor disclosed by Guest); magnets being incorporated into the pipeline pig (Detailed description, Paragraph 12); where the magnets are electromagnets and includes coil 922) that is multi-layered; wherein the power source is one of alternating current or direct current; wherein the pipeline pigs are driven for a substantial distance through the pipeline. It would have been obvious to one of ordinary skill in the art at the time of invention to modify the apparatus for enhancing fluid velocity in a pipeline disclosed by

Foreman in view of Guest to provide an inexpensive and practical solution for detecting pipeline leaks. (Guest, background of invention).

Allowable Subject Matter

Claims 10, 13, 14, 15, 18-21, 32, 36, 37, 40 and 41 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments with respect to claims 1-3, 6-15, 17-23, 25-37, 39-43 have been considered but are moot in view of the new ground(s) of rejection.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VIKANSHA S. DWIVEDI whose telephone number is (571)272-7834. The examiner can normally be reached on M-F, 8-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Devon Kramer can be reached on 571-272-7118. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Devon C Kramer/
Supervisory Patent Examiner, Art
Unit 3683

VSD